

WE CLAIM:

1 1. A method for dynamically providing information to a user via a visual display
2 associated with a user computer, the method comprising the following steps:
3 assigning the user a user identification code;
4 assigning an application code to at least a first website and a second website to be
5 viewed by said user;
6 recording the user's activity associated with said first and second websites by
7 monitoring said user identification code and said application code;
8 determining the user's viewing preference associated with said first website based
9 on the user's activity associated with said first website;
10 determining the user's viewing preference associated with said second website
11 based on the user's activity associated with said second website; and
12 dynamically adjusting the user's display in accordance with the user's preference
13 associated with the website being viewed by the user.

1 2. The method of claim 1, further comprising the step of downloading from a system
2 server a display application for each website where the user's activity is to be recorded.

1 3. The method of claim 2, further comprising the step of utilizing a message broker
2 to handle communications between said server and said display application.

1 4. The method of claim 2, further comprising the step of utilizing a message broker
2 to handle communications between said server and other applications associated with said user
3 computer.

1 5. The method of claim 1, wherein the recording step comprises the further step of
2 recording a URL associated with the website being viewed by said user.

1 6. The method of claim 1, wherein said visual display includes a browser function
2 and said adjusting step adjusts the browser.

1 7. The method of claim 1, further comprising the step of generating a user
2 information record associated with each user, the user information record including the user
3 identification code, an IP address field indicating the last internet address from which the user
4 communicated, a country code field indicating the country from which the user last
5 communicated, and a last login field indicating the last time that the user communicated.

1 8. The method of claim 7, further comprising the step of customizing information
2 presented to a user in accordance with the country code field associated with the user.

1 9. The method of claim 1, further comprising the step of generating a user session
2 record associated with a communication session with the user, the user session record including
3 the user identification code or a similar unique identifier associated with the user, the application
4 code associated with a website, an IP address field indicating the last internet address from which
5 the user communicated, session timing information, and a unique session identification code.

1 10. The method of claim 9, wherein said session timing information includes a
2 session start time and a session end time.

1 11. The method of claim 10, further comprising the step of generating user-specific
2 statistics including user session duration and peak time of use.

1 12. The method of claim 10, further comprising the step of generating average user
2 session duration, average client session duration, user session peak time of use and client session
3 peak time of use for a plurality of users.

1 13. The method of claim 1, further comprising the step of generating a session
2 identifier for tracking application activities, the session identifier including the application code
3 associated with the website and an application name field indicating the textual name associated
4 with the website.

1 14. The method of claim 13, further comprising the step of transmitting messages to
2 be displayed the user, and wherein the session identifier further includes an application message
3 interval field indicating a period of time between messages sent from a message queue to the
4 application, a welcome wait interval which indicates an amount of time to wait before requesting
5 a next display message from the message queue, and a query time interval which indicates a
6 period of time between application queries for additional information.

1 15. The method of claim 1, further comprising the step of generating an application
2 navigation record indicating the primary location the process initially accesses when the process
3 is first executed, the application navigation record including the application code, a navigation
4 URL field indicating a web address to be initially accessed upon initial execution, a country code
5 field indicating the user's country for which the URL navigation field is applicable.

1 16. The method of claim 1, further comprising the step of generating an application
2 customization record which includes application parameters related to user behavior, the

3 application customization record including the application code, a user behavior type indicator,
4 and a tag name field and value name field which provide a textual information tag and an
5 associated value, respectively, for the application.

1 17. The method of claim 16, further comprising the step of customizing the user's
2 display in accordance with the user behavior type.

1 18. The method of claim 1, further comprising the step of generating a user behavior
2 information record indicating weighted information about the user's behavior, the user behavior
3 information record including the user identification code or a similar unique identifier associated
4 with the user, a behavior type field indicating information about the user's type of interests, and a
5 weight field indicating the appropriate weighting or significance of each user behavior type.

1 19. The method of claim 18, further comprising the step of generating a plurality of
2 use behavior information records, and utilizing the plurality of user behavior information records
3 to perform additional customization of the user's display.

1 20. The method of claim 1 further comprising the step of generating a user URL
2 information record which indicates user URL tracking information used to generate user behavior
3 information, the user URL information record including the user identification code or a similar

4 unique identifier associated with the user, a session identifier which identifies the session of the
5 user for a particular URL, a domain field and page field associated with the particular URL, a
6 page type field which identifies the type of URL, and a duration field which indicates an amount
7 of time the user spent at a particular URL.

1 21. The method of claim 20, further comprising the step of utilizing user URL
2 information records to generate user behavior statistics, including at least one of total and
3 average number of times the user visited a particular URL, the total and average time the user
4 spent at a particular URL, the peak time when the user visited a particular URL, and the types of
5 pages viewed by the user.

1 22. The method of claim 20, further comprising the step of utilizing user URL
2 information records to generate URL statistics, including at least one of total and average number
3 of times that users visited a particular URL, the total and average time users spent at a particular
4 URL, and the peak time when users visited a particular URL.

1 23. The method of claim 20, further comprising the step of utilizing user URL
2 information records to customize the user's display.

1 24. The method of claim 1, further comprising the step of generating a user
2 application information record indicating information associated with client applications the user
3 has downloaded, the user application information record including the user identification code or
4 a similar unique identifier associated with the user, the application code for each particular
5 application downloaded by the user, an application version field identifying the current version of
6 each particular application, a download date field indicating the date the user downloaded the
7 particular application.

1 25. The method of claim 24, wherein the user application information record further
2 includes a last login field indicating the last time the user used the particular application, and a
3 last message identification field indicating the last message displayed to the user in connection
4 with the particular application.

1 26. The method of claim 24, further comprising the step of updating a particular
2 application in accordance with at least one of the application version field and the download date
3 field.

1 27. The method of claim 25, further comprising the step of displaying a next message
2 to the user in accordance with at least one of the last login field and the last message
3 identification field.

1 28. The method of claim 1, further comprising the step of generating an application
2 tracking record which contains information regarding application use, the application tracking
3 record including the user identification code or a similar unique identifier associated with the
4 user, a date field representing the date of a particular record, an event code field indicating a
5 particular type of event for each application, and a count field indicating the number of times a
6 particular event has occurred for a particular application.

1 29. The method of claim 28, further comprising the step of incrementing the count
2 field for each occurrence of a particular event in connection with each execution of a client
3 application.

1 30. The method of claim 1, further comprising the step of generating a message queue
2 record indicating a list of messages to be displayed to the user, the message queue record
3 including the user identification code or a similar unique identifier associated with the user, a
4 behavior type field indicating a user behavior for which messages in the queue will be
5 transmitted to the user, a message number field indicating a sequential number assigned to each
6 message, a messages field which indicates the list of messages to be transmitted to the user, and a
7 URL field indicating a web address to be transmitted to the user.

1 31. The method of claim 30, wherein the message queue record further includes a
2 mode indication indicating whether the message will be displayed as a popup window or whether
3 the application associated with the message will be pulsed when the message is transmitted to the
4 user.

1 32. The method of claim 30, further comprising the following steps:
2 requesting a message to be displayed to the user in accordance with a welcome
3 wait interval which indicates an amount of time to wait before requesting a next display message
4 from the message queue; and
5 selecting a message to be displayed to the user in accordance with the
6 identification of the user and the user's behavior type.

1 33. The method of claim 32, further comprising the step of transmitting the selected
2 message to the user in accordance with an application message interval and displaying the
3 selected message in accordance with the user's display preferences.

1 34. The method of claim 1, further comprising the step of generating an activity log
2 file which records user activities, the activity log file including a time field indicating when the
3 activity log file was created, the user identification code or a similar unique identifier associated

4 with the user, a user IP field indicating the user's last internet connection address, and an activity
5 field indicating a description for a particular user activity.

1 35. The method of claim 1, further comprising the step of utilizing an external
2 interface to interface with other systems and processes.

1 36. The method of claim 1, further comprising the step of installing said application
2 as a shortcut on the user's desktop.

1 37. The method of claim 1, further comprising the step of installing said application
2 in the user's program files menu.

1 38. The method of claim 1, further comprising the step of installing said application
2 in the user's start menu.

1 39. The method of claim 1, further comprising the step of installing said application
2 as a tray icon.

1 40. The method of claim 1, further comprising the step of optimizing the display of
2 website information by dynamically configuring the client application in order to present website
3 information in accordance with the user's history and preferences.

1 41. The method of claim 1, further comprising the step of tracking user activity in
2 connection with locations that are specified in URL format but which are not URL locations.

1 42. The method of claim 41, wherein said locations that are specified in URL format
2 include one of networked files and networked resources.

1 43. The method of claim 1, further comprising the step of calculating user behavior
2 for a plurality of users.

1 44. The method of claim 1, further comprising the step of calculating user behavior
2 for an individual user in real-time.

1 45. The method of claim 1, further comprising the steps of performing at least one
2 data count based on the user's prior usage history, and weighting the at least one data count to
3 adjust the relevance of the at least one data count to produce a running total score for at least one
4 website viewed by the user.

1 46. The method of claim 45, further comprising the step of adjusting the running total
2 score in accordance with an amount of time the user spent at at least one website included in the
3 count.

1 47. The method of claim 45, further comprising the step of determining the user's
2 behavior by selecting the website with the highest running total score.

1 48. The method of claim 45, further comprising the step of determining the user's
2 behavior by selecting the website with the second highest running total score in the event that the
3 user does not have a client application corresponding to the website with the highest running
4 total score.

1 49. The method of claim 1, further comprising the step of associating a single client
2 application or website with a plurality of users.

1 50. The method of claim 1, further comprising the step of associating a single user
2 with a plurality of client applications or websites.

1 51. The method of claim 1, further comprising the step of utilizing a plurality of
2 different varieties of client applications for a single website and a single user.

1 52. The method of claim 51, wherein said plurality of different client applications
2 includes client applications with increased functionality and client applications with increased
3 speed.

1 53. The method of claim 1, further comprising the step of transmitting customized
2 messages to a user in accordance with the user's usage.

1 54. The method of claim 53, wherein the customized messages include at least one of
2 promotional information, advertisements, and news.

1 55. A method for dynamically providing information to a user via a visual display
2 associated with a user computer, the method comprising the following steps:

3 (a) at the user computer, requesting from a remote server configuration
4 information associated with a website being viewed by said user;

5 (b) reconfiguring the visual display in accordance with the configuration
6 information;

7 (c) transmitting usage information associated with the website being viewed
8 by the user to the remote server; and

9 (d) repeating steps (a), (b), and (c) for each website being viewed by the user.

1 56. A computer readable medium encoded with processing instructions for
2 performing a method for dynamically providing information to a user via a visual display
3 associated with a user computer, the method comprising:

4 assigning the user a user identification code;
5 assigning an application code to at least a first website and a second website to be
6 viewed by said user;

7 recording the user's activity associated with said first and second websites by
8 monitoring said user identification code and said application code;

9 determining the user's viewing preference associated with said first website based
10 on the user's activity associated with said first website;

11 determining the user's viewing preference associated with said second website
12 based on the user's activity associated with said second website; and

13 dynamically adjusting the user's display in accordance with the user's preference
14 associated with the website being viewed by the user.

1 57. A computer readable medium encoded with processing instructions for
2 performing a method for dynamically providing information to a user via a visual display
3 associated with a user computer, the method comprising:

4 (a) at the user computer, requesting from a remote server configuration
5 information associated with a website being viewed by said user;

6 (b) reconfiguring the visual display in accordance with the configuration
7 information;

8 (c) transmitting usage information associated with the website being viewed
9 by the user to the remote server; and

10 (d) repeating steps (a), (b), and (c) for each website being viewed by the user.

1 58. An apparatus for dynamically providing information to a user via a visual display
2 associated with a user computer, comprising:

3 a processor; and

4 a memory storing processing instructions for controlling the processor, the
5 processor operative with the processing instructions to:

6 assign the user a user identification code;

7 assign an application code to at least a first website and a second website
8 to be viewed by said user;

9 record the user's activity associated with said first and second websites by
10 monitoring said user identification code and said application code;
11 determine the user's viewing preference associated with said first website
12 based on the user's activity associated with said first website;
13 determine the user's viewing preference associated with said second
14 website based on the user's activity associated with said second website; and
15 dynamically adjust the user's display in accordance with the user's
16 preference associated with the website being viewed by the user.

1 59. An apparatus for dynamically providing information to a user via a visual display
2 associated with a user computer, comprising:
3 a processor; and
4 a memory storing processing instructions for controlling the processor, the
5 processor operative with the processing instructions to:
6 (a) at the user computer, request from a remote server configuration
7 information associated with a website being viewed by said user;
8 (b) reconfigure the visual display in accordance with the configuration
9 information;
10 (c) transmit usage information associated with the website being
11 viewed by the user to the remote server; and

- 12 (d) repeat steps (a), (b), and (c) for each website being viewed by the
- 13 user.